

K. Canella
09/531369

RECEIVED
1647
SEP 22 2000

TECHCENTER 10042200

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/531,369

DATE: 09/14/2000

TIME: 10:25:28

Input Set : A:\Sequence.txt

Output Set: N:\CRF3\09142000\I531369.raw

```

4 <110> APPLICANT: Williamson, Mark
6 <120> TITLE OF INVENTION: MDA-9 AND USES THEREOF
8 <130> FILE REFERENCE: 07334-122001
10 <140> CURRENT APPLICATION NUMBER: US 09/531,369
C--> 11 <141> CURRENT FILING DATE: 1999-03-21
13 <150> PRIOR APPLICATION NUMBER: US 60/125,759
14 <151> PRIOR FILING DATE: 1999-03-23
16 <160> NUMBER OF SEQ ID NOS: 3
18 <170> SOFTWARE: FastSEQ for Windows Version 4.0
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 2068
22 <212> TYPE: DNA
23 <213> ORGANISM: Homo sapiens
25 <220> FEATURE:
26 <221> NAME/KEY: CDS
27 <222> LOCATION: (76)...(970)
29 <400> SEQUENCE: 1
30 cctcagaagt cctgcccagt gaccggaggc ggcggcggcg agcgggtcct tgtgggctag      60
31 aagaatcctg caaaa atg tct ctc tat cca tct ctc gaa gac ttg aag gta      111
32           Met Ser Leu Tyr Pro Ser Leu Glu Asp Leu Lys Val
33           1           5           10
35 gac aaa gta att cag gct caa act gct ttt tct gca aac cct gcc aat      159
36 Asp Lys Val Ile Gln Ala Gln Thr Ala Phe Ser Ala Asn Pro Ala Asn
37           15           20           25
39 cca gca att ttg tca gaa gct tct gct cct atc cct cac gat gga aat      207
40 Pro Ala Ile Leu Ser Glu Ala Ser Ala Pro Ile Pro His Asp Gly Asn
41           30           35           40
43 ctc tat ccc aga ctg tat cca gag ctc tct caa tac atg ggg ctg agt      255
44 Leu Tyr Pro Arg Leu Tyr Pro Glu Leu Ser Gln Tyr Met Gly Leu Ser
45 45           50           55           60
47 tta aat gaa gaa gaa ata cgt gca aat gtg gcc gtg gtt tct ggt gca      303
48 Leu Asn Glu Glu Glu Ile Arg Ala Asn Val Ala Val Val Ser Gly Ala
49           65           70           75
51 cca ctt cag ggg cag ttg gta gca aga cct tcc agt ata aac tat atg      351
52 Pro Leu Gln Gly Gln Leu Val Ala Arg Pro Ser Ser Ile Asn Tyr Met
53           80           85           90
55 gtg gct cct gta act ggt aat gat gtt gga att cgt aga gca gaa att      399
56 Val Ala Pro Val Thr Gly Asn Asp Val Gly Ile Arg Arg Ala Glu Ile
57           95           100          105
59 aag caa ggg att cgt gaa gtc att ttg tgt aag gat caa gat gga aaa      447
60 Lys Gln Gly Ile Arg Glu Val Ile Leu Cys Lys Asp Gln Asp Gly Lys
61           110          115          120
63 att gga ctc agg ctt aaa tca ata gat aat ggt ata ttt gtt cag cta      495
64 Ile Gly Leu Arg Leu Lys Ser Ile Asp Asn Gly Ile Phe Val Gln Leu
65 125           130           135           140
67 gtc cag gct aat tct cca gcc tca ttg gtt ggt ctg aga ttt ggg gac      543
68 Val Gln Ala Asn Ser Pro Ala Ser Leu Val Gly Leu Arg Phe Gly Asp

```

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/531,369

DATE: 09/14/2000
 TIME: 10:25:28

Input Set : A:\Sequence.txt
 Output Set: N:\CRF3\09142000\I531369.raw

```

69          145          150          155
71 caa gta ctt cag atc aat ggt gaa aac tgt gca gga tgg agc tct gat 591
72 Gln Val Leu Gln Ile Asn Gly Glu Asn Cys Ala Gly Trp Ser Ser Asp
73          160          165          170
75 aaa gcg cac aag gtg ctc aaa cag gct ttt gga gag aag att acc atg 639
76 Lys Ala His Lys Val Leu Lys Gln Ala Phe Gly Glu Lys Ile Thr Met
77          175          180          185
79 acc att cgt gac agg ccc ttt gaa cgg acg att acc atg cat aag gat 687
80 Thr Ile Arg Asp Arg Pro Phe Glu Arg Thr Ile Thr Met His Lys Asp
81          190          195          200
83 agc act gga cat gtt ggt ttt atc ttt aaa aat gga aaa ata aca tcc 735
84 Ser Thr Gly His Val Gly Phe Ile Phe Lys Asn Gly Lys Ile Thr Ser
85 205          210          215          220
87 ata gtg aaa gat agc tct gca gcc aga aat ggt ctt ctc acg gaa cat 783
88 Ile Val Lys Asp Ser Ser Ala Ala Arg Asn Gly Leu Leu Thr Glu His
89          225          230          235
91 aac atc tgt gaa atc aat gga cag aat gtc att gga ttg aag gac tct 831
92 Asn Ile Cys Glu Ile Asn Gly Gln Asn Val Ile Gly Leu Lys Asp Ser
93          240          245          250
95 caa att gca gac ata ctg tca aca tct ggg act gta gtt act att aca 879
96 Gln Ile Ala Asp Ile Leu Ser Thr Ser Gly Thr Val Val Thr Ile Thr
97          255          260          265
99 atc atg cct gct ttt atc ttt gaa cat att att aag cgg atg gca cca 927
100 Ile Met Pro Ala Phe Ile Phe Glu His Ile Ile Lys Arg Met Ala Pro
101          270          275          280
103 agc att atg aaa agc cta atg gac cac acc att cct gag gtt t 970
W--> 104 Ser Ile Met Lys Ser Leu Met Asp His Thr Ile Pro Glu Val
105 285          290          295
107 aaaattcacg gcaccatgga aatgtagctg aacgtctcca gtttccttct ttggcaactt 1030
108 ctgtattatg cacgtgaagc cttcccggag ccagcgagca tatgctgcat gaggaccttt 1090
109 ctatcttaca ttatggctgg gaatcttact ctttcatctg ataccttggt cagatttcaa 1150
110 aatagttgta gccttatcct ggttttacag atgtgaaact ttcaaagagat ttactgactt 1210
111 tctagaata gtttctctac tggaaacctg atgcttttat aagccattgt gattaggatg 1270
112 actgttacag gcttagcttt gtgtgaaaac cagtcacctt tctcctaggt aatgagtagt 1330
113 gctgttcata ttactttagt tctatagcat actgcatctt taacatgcta tcatagtaca 1390
114 tttagaatga ttgcctttga tttttttttt aaattctgtg tgtgtgtgtg taaaatgcca 1450
115 attaagaaca ctggtttcat tccatgtaag cattaaacag tgtatgtagg ttccaagaga 1510
116 ttgtgatgat tcttaaattt taactacctt cacttaatat gcttgaactg tcgccttaac 1570
117 tatgttaagc atctagacta aaagccaaaa tataattatt gotgcctttc taaaaaccca 1630
118 aaatgtagtt ctctattaac ctgaaatgta cactagccca gaacagttta atggtaacta 1690
119 ctgagctata gcatagctgc ttagttgttt ttgagagttt ttagtcaaca cataatggaa 1750
120 acttccttct tctaaaagtt gccagtgcca cttttaagaa gtgaatcact atatgtgatg 1810
121 taaaagttat tacactaaac aggataaact tttagctccc cttttgttca ttgtggatt 1870
122 aagtggata atacttaatt ttggcatttg actcttaaga ttatgtaacc tagctacttt 1930
123 gggatggtct tagaatattt ttctgataac ttgttccttt tcttgactcc tcttgcaaaa 1990
124 caaaatgata gttgacactt tatcctgatt tttttcttct ttttggttta tgtctattct 2050
125 aattaaatat gtataaat
127 <210> SEQ ID NO: 2
128 <211> LENGTH: 298

```

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/531,369

DATE: 09/14/2000
 TIME: 10:25:28

Input Set : A:\Sequence.txt
 Output Set: N:\CRF3\09142000\I531369.raw

```

129 <212> TYPE: PRT
130 <213> ORGANISM: Homo sapiens
132 <400> SEQUENCE: 2
133 Met Ser Leu Tyr Pro Ser Leu Glu Asp Leu Lys Val Asp Lys Val Ile
134 1 5 10 15
135 Gln Ala Gln Thr Ala Phe Ser Ala Asn Pro Ala Asn Pro Ala Ile Leu
136 20 25 30
137 Ser Glu Ala Ser Ala Pro Ile Pro His Asp Gly Asn Leu Tyr Pro Arg
138 35 40 45
139 Leu Tyr Pro Glu Leu Ser Gln Tyr Met Gly Leu Ser Leu Asn Glu Glu
140 50 55 60
141 Glu Ile Arg Ala Asn Val Ala Val Val Ser Gly Ala Pro Leu Gln Gly
142 65 70 75 80
143 Gln Leu Val Ala Arg Pro Ser Ser Ile Asn Tyr Met Val Ala Pro Val
144 85 90 95
145 Thr Gly Asn Asp Val Gly Ile Arg Arg Ala Glu Ile Lys Gln Gly Ile
146 100 105 110
147 Arg Glu Val Ile Leu Cys Lys Asp Gln Asp Gly Lys Ile Gly Leu Arg
148 115 120 125
149 Leu Lys Ser Ile Asp Asn Gly Ile Phe Val Gln Leu Val Gln Ala Asn
150 130 135 140
151 Ser Pro Ala Ser Leu Val Gly Leu Arg Phe Gly Asp Gln Val Leu Gln
152 145 150 155 160
153 Ile Asn Gly Glu Asn Cys Ala Gly Trp Ser Ser Asp Lys Ala His Lys
154 165 170 175
155 Val Leu Lys Gln Ala Phe Gly Glu Lys Ile Thr Met Thr Ile Arg Asp
156 180 185 190
157 Arg Pro Phe Glu Arg Thr Ile Thr Met His Lys Asp Ser Thr Gly His
158 195 200 205
159 Val Gly Phe Ile Phe Lys Asn Gly Lys Ile Thr Ser Ile Val Lys Asp
160 210 215 220
161 Ser Ser Ala Ala Arg Asn Gly Leu Leu Thr Glu His Asn Ile Cys Glu
162 225 230 235 240
163 Ile Asn Gly Gln Asn Val Ile Gly Leu Lys Asp Ser Gln Ile Ala Asp
164 245 250 255
165 Ile Leu Ser Thr Ser Gly Thr Val Val Thr Ile Thr Ile Met Pro Ala
166 260 265 270
167 Phe Ile Phe Glu His Ile Ile Lys Arg Met Ala Pro Ser Ile Met Lys
168 275 280 285
169 Ser Leu Met Asp His Thr Ile Pro Glu Val
170 290 295
172 <210> SEQ ID NO: 3
173 <211> LENGTH: 894
174 <212> TYPE: DNA
175 <213> ORGANISM: Homo sapiens
177 <400> SEQUENCE: 3
178 atgtctctct atccatctct cgaagacttg aaggtagaca aagtaattca ggctcaaact 60
179 gctttttctg caaacctgc caatccagca attttgtcag aagcttctgc tctatccct 120
180 cacgatggaa atctctatcc cagactgtat ccagagctct ctcaatacat ggggctgagt 180

```

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/531,369

DATE: 09/14/2000
 TIME: 10:25:28

Input Set : A:\Sequence.txt
 Output Set: N:\CRF3\09142000\I531369.raw

181	ttaa	atgaag	aagaa	atacg	tgcaa	atgtg	gccgt	ggttt	ctggt	gcacc	acttc	agggg	240
182	cagtt	ggtag	caagac	cttc	cagtata	aac	tatat	ggtgg	ctcct	gtaac	tggt	aatgat	300
183	gttga	aattc	gtagag	caga	aatta	agcaa	gggat	tcgtg	aagtc	atttt	gtgt	aaggat	360
184	caagat	ggaa	aaatt	ggact	caggt	ctaaa	tcaat	agata	atggt	atat	tggt	cagcta	420
185	gtccag	gcta	attct	ccagc	ctcatt	ggtt	ggtct	gagat	ttggg	gacca	agtac	ttcag	480
186	atcaat	ggtg	aaaact	gtgc	aggat	ggagc	tctga	taaa	cgaca	aagg	gctca	aacag	540
187	gctttt	ggag	agaag	attac	catga	ccatt	cgtga	caggc	ccttt	gaacg	gacga	attacc	600
188	atgcata	aagg	atagc	actgg	acatg	ttggt	tttat	cttta	aaaat	ggaaa	aataa	catcc	660
189	atagt	gaaag	atagc	tctgc	agccag	aaat	ggtct	cttca	cggaac	ataa	catct	gtgaa	720
190	atcaat	ggac	agaat	gtcat	tggatt	gaag	gactct	caaa	ttgcag	acat	actgt	caaca	780
191	tctggg	actg	tagtt	actat	tacaat	catg	cctgc	tttta	tcttt	gaaca	tattat	taag	840
192	cggat	ggcac	caagc	attat	gaaaag	ccta	atggac	caca	ccatt	ctga	ggtt		894

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/531,369

DATE: 09/14/2000
TIME: 10:25:29

Input Set : A:\Sequence.txt
Output Set: N:\CRF3\09142000\I531369.raw

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:104 M:361 W: Invalid Split Codon, Sequence data for SEQ ID#: 1

Application No.: 09/531389

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING
NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- ☐ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to these regulations, published at 1114 OG 29, May 15, 1990 and at 55 FR 18230, May 1, 1990.
- ☒ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- ☒ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- ☐ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked-up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☒ 6. ~~The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).~~
- ☐ 7. Other: _____

Applicant Must Provide:

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216

For CRF Submission Help, call (703) 308-4212

For PatentIn software help, call (703) 308-6856

PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR RESPONSE